

WATER QUALITY TEAM MEETING NOTES

**November 12, 2002
National Marine Fisheries Service Offices
Portland, Oregon**

Introductions and Review of the Agenda.

Mark Schneider of NMFS, WQT co-chair, welcomed everyone to the meeting, held November 12 at the National Marine Fisheries Service's offices in Portland, Oregon. The meeting agenda and a list of attendees are attached as Enclosures A and B. Please note that some of the enclosures referenced in these meeting notes may be too lengthy to routinely attach to the minutes; please contact Kathy Ceballos (503/230-5420) to obtain copies.

1. Discussion, Decision and Recommendations regarding the 2003 Fixed Monitoring Station Locations.

Schneider noted that it is now time for the WQT to make decisions about the locations of the 2003 fixed monitoring stations, so that the group can provide its input to the Corps in time to implement any changes needed to the system this spring. He introduced Russ Heaton of the Corps, who described some of the improvements the Corps has been making to some of its existing fixed monitoring sites.

Heaton said the most significant change the Corps made in 2002 is their refurbishment of five of their existing stations: Ice Harbor tailwater, Anatone, and the tailwater stations at Little Goose, Lower Granite and Lower Monumental. We also did some work at the Peck station, Heaton said. The main thing we did at these stations was to install high-density (5/8" thick wall) 8" diameter polyethylene pipe, which gave us additional strength and allowed us to install multiple instruments in the same pipe, he explained. At Anatone, we were able to add 150 feet to the length of the pipe, placing the station right out in the middle of the river; we did the same thing at Peck, Heaton said.

What about McNary? one participant asked. Currently, McNary's tailwater station is a little shallower than we would like, due to anchor cable breakage, Heaton replied; we want to pull it down to about 50 feet. That station also needs to have some sweeps put into it, similar to what we did at Ice Harbor, angling the pipe somewhat to achieve a more optimal orientation. Before we do that, however, we need to look more closely at the lateral distribution at that project, he said – the instrument is currently located on the north shore, and spill occurs at the south end of the project. Heaton added that, in his opinion, 2003 would be a good time for a

thorough review of that site, given the fact that the Corps has funding available for such a study.

Joe Carroll discussed the thermal gradients present in the Lower Snake pools; he noted that, in each of those pools, the gas readings are frequently not what the Corps would consider to be representative of the cross-sectional average of the pool as a whole, due to thermal factors. Our intent this year is to investigate some deeper sites at the forebays of those four dams, as well as some upstream sites and, possibly, some sites within the dams. At the Lower Columbia projects, we've found that the releases from the powerhouse tend to be quite representative, Carroll noted – that generally seems to give us a fairly good mix of both temperature and gas. Our intent is to identify four alternative sites at each Lower Snake project and compare their readings to those of the existing instrument, similar to what we did last year at John Day and The Dalles, Carroll said. We also want to make sure we include a McNary forebay study in the FY'03 gas study package, he said, adding, however, that none of these studies is yet cast in stone – that's why we wanted to get the Water Quality Team's input, he said.

In summary, then, said Schneider, what I'm hearing is that a number of these changes have already occurred, including modifications to the tailwater stations at Ice Harbor, Lower Monumental, Little Goose and Lower Granite; Peck has also been upgraded and moved out about 20 feet, and 150 feet of pipe has been added to the Anatone gauge. At McNary, the station is shallower than we would like due to broken anchor cables, and the Corps intends to repair that situation. That's correct, said Heaton; given the need for those repairs, now would be a good time to begin discussing the possibility of doing some RPA 132 work at that tailwater station. In addition, said Carroll, we're suggesting that the two forebay fixed monitoring stations at McNary be included in the study Walla Walla District is planning for the Lower Snake projects.

Carroll added that, in his view, the Lower Snake tailwater stations are probably the area of least concern for Walla Walla District; those stations are functioning well, and appear to be representative of what is occurring in the river. So your recommendation is that we don't need to do any work at the Lower Snake projects' tailwater stations this year? Schneider asked. That's correct, Carroll replied, now that we've improved the stations at Peck and Anatone – those stations are meeting the purposes we've laid out for them.

The discussion then moved on to the Corps' Portland District monitoring sites. Starting with Camas/Washougal, Jim Britton said that last year's study results do not indicate a significant benefit to moving that site to Corbett. The group debated the question of what constitutes a "significant" benefit; Schneider said it would be useful if the TGG and Gary Fredricks could review and discuss the 2002 monitoring data from the newly-installed Bonneville Dam flow deflectors. Carroll said he will work with Mike Schneider, who is analyzing the data, and Fredricks to facilitate the exchange of this data.

Moving on, Britton said that, based on the historic data collected, the Corps has concluded that the Warrendale site has some serious problems, and should eventually be eliminated in favor of a station in the Bonneville spillway – perhaps the site used during the 2002 spill test at that project. With respect to the Bonneville forebay site, said Britton, we're recommending no changes in 2003 – that instrument seems to be functioning very well.

At The Dalles, the Corps feels the tailwater site is not currently in a very good location to take readings of the spill water, Britton said; Joe Carroll's recommendation is that that site be moved about 1,200 feet downstream and closer to the north shore. We feel that change will make the tailwater site at The Dalles more consistent with the other tailwater monitoring stations in the Lower Columbia, Carroll said. Schneider said that, again, it would be helpful if he, Gary Fredricks and the WQT could review the Corps' 2002 spill test data from The Dalles before making a recommendation as to whether or not The Dalles tailwater station should be moved. Britton added that, in the Corps' opinion, the forebay site at The Dalles is functioning properly and should not be moved.

At John Day, said Britton, the tailwater site has been functioning well and appears to be representative of actual conditions across the river. However, we may want to look at some additional locations off the tailrace deck at that project, as well as adding an auxiliary instrument deeper in the tailrace water column, Carroll said.

The forebay site at John Day is a more complex issue, said Carroll – the current site isn't very representative of actual conditions, and ultimately, I think our recommendation will be to relocate the John Day forebay instrument. We're going to look at some alternative locations this year, he said, but we're probably not ready to stop using the current site right away. Those alternative locations will likely be, first, off of the draft tube deck in the releases from the powerhouse, and second, upstream of the dam in the boating restricted zone.

Schneider said that, in his opinion, all of the Corps' recommendations on modifications to the fixed monitoring system in 2003 make sense, pending his review of the 2002 monitoring data from Bonneville and The Dalles; I'm not hearing any major WQT disagreements about what the Corps is planning to do. He asked how the Corps would like to memorialize this understanding with the Water Quality Team; Dick Cassidy replied that the minutes of today's meeting would probably be adequate. It was so agreed.

With that, the meeting was adjourned. Meeting summary prepared by Jeff Kuechle, BPA contractor.